



EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING EBOLA VIRUS DISEASE AND ITS MANAGEMENT AMONG STAFF NURSES

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ABSTRACT

A study was done to assess the effectiveness of self-instructional module on knowledge regarding Ebola virus disease and its management among staff nurses. **Background:** The Ebola virus causes an acute, serious illness which is often fatal if untreated. **Objectives:** 1. To assess the pre-test knowledge regarding Ebola virus disease among staff nurses working in Bombay Hospital, Indore. 2. To find out the effectiveness of self-instructional module on Ebola virus disease among staff nurses working in Bombay Hospital, Indore. 3. To find out the association between pre-test knowledge of nurses with selected demographic variables of staff nurses working in Bombay Hospital, Indore. **Methods:** An evaluative approach with Pre-experimental one group pre-test post-test design was used for the study. The sample consists of 50 staff nurses were selected by using Non-Probability convenient sampling technique. Structured questionnaires were administered to evaluate the knowledge on Ebola virus disease and its management before and after introduction of self-instructional module. The collected data was analyzed by using descriptive and inferential statistics. **Results:** The result showed that there was a significant difference between pre-test and post-test knowledge scores as assessed by the paired t-test value at 27.57. Hence it is statistically interpreted that the self-instructional module could be an effective strategy to improve the knowledge of staff nurses on Ebola virus disease and its management. **Conclusion:** Based on the findings of the study there was a significant increase in the knowledge of subjects after the introduction of self-instructional module.

KEYWORDS: Ebola virus disease; Knowledge; Self-Instruction Module; Staff Nurses.

STATEMENT OF THE PROBLEM

A Pre-Experimental study to assess the effectiveness of Self-Instructional Module on knowledge regarding Ebola Virus Disease and its Management among Staff Nurses working in Bombay Hospital, Indore, M.P.

INTRODUCTION

Ebola virus disease is a highly contagious hemorrhagic disease has today become a major health concern in the developing country worldwide. Since 1976, there have been 885,343 suspected and laboratory confirmed cases of Ebola disease in West Africa. It is true that Ebola is a rare epidemic disease but it is also true that it has a mortality rate of 40% - 90%. The largest outbreak is the ongoing 2014 West Africa Ebola Outbreak, which has affected Guinea, Liberia, Sierra Leone and Nigeria. As of August 2014, more than 1,750 cases have been suspected. Severely infected patients require intensive supportive care. No specific treatment or vaccine is available for this disease. Hence WHO responds outbreak of Ebola virus disease by supporting surveillance, community engagement, case management, laboratory services, contact tracing, infection control, logistical support and training and assistance with safe burial practices.

As the disease is spreading rapidly, even in India victim was found in month of November 2014 at Delhi Airport. Raising awareness of risk factors for Ebola infection and protective measures that individuals can take is an effective way to reduce human transmission. Health-care workers should always take standard precautions when caring for patients, regardless of their presumed diagnosis. Health-care workers caring for patients with suspected or confirmed Ebola virus should apply extra infection control measures to prevent contact with the patient's blood and body fluids and contaminated surfaces or materials such as clothing and bedding. Especially nurses, when in close contact of patients with EBV, health-care workers should wear face protection (a face shield or a medical mask and goggles), a clean, non-sterile long-sleeved gown, and gloves (sterile gloves for some procedures). 1-5

OBJECTIVES

- To assess the pre-test knowledge regarding Ebola virus disease among staff nurses working in Bombay Hospital, Indore.
- To find out the effectiveness of self-instructional module on Ebola virus disease among staff nurses working in Bombay Hospital, Indore.
- To find out the association between pre-test knowledge of nurses with selected demographic variables of staff nurses working in Bombay Hospital, Indore.

HYPOTHESES

H₁: There will be significant difference between pre-test and post-test knowledge score regarding Ebola virus disease and its management among staff nurses working in Bombay Hospital, Indore.

H₂: There will be significant association between pre-test knowledge score with their selected demographic variables.

METHODOLOGY

A Pre-experimental one group pre-test post-test design was used for the study. The present study was conducted at Bombay Hospital, with a sample size of 50 Staff Nurses were selected through Non-Probability Sampling Technique. The investigator used a demographic variable Performa and structured questionnaire on knowledge of Ebola virus disease and its management to collect the data. The data collection tools were validated and reliability was established. After the Pre-test, self-instructional module was administered to the staff nurses. A Post-test was conducted to determine the knowledge of the subjects on 7th day by using same questionnaire. The data collected was analyzed by using descriptive and inferential statistics.

FINDINGS

Section-I: Description of demographic variables

- The data shows that out of 50 staff nurses, 32(64%) was belonged to the age group of 21-25 yrs., 13(26%) was belonged to the age group of 26-30 yrs. and 5(10%) was belonged to the age group of 31-35 yrs.
- In relation to the sex group, 8(16%) staff nurses were male and 42(84%) staff nurses were female.
- On the basis of educational status 14(28%) of staff nurses had done General Nursing & Midwifery, 28(56%) had done Basic B. Sc Nursing, 7(14%) had done Post basic B. Sc Nursing and only 1(2%) have done M. Sc Nursing.
- In accordance to the area of experience, 20(40%) staff nurses were working in ICU, 7(14%) working in CCU, 3(6%) working in OT and 20(40%) staff nurses were working in other wards.
- With regards to experience in years, 25(50%) staff nurses had 0-2 years of experience, 16(32%) had 3-4 years of experience, 7(14%) had 5-6 years of experience and only 2(4%) staff nurses have more than 6 years of experience.

Section- II: Findings related to the effectiveness of self-instructional module on Ebola virus disease among staff nurses.

N=50

Knowledge	Mean	Standard Deviation (S.D.)	Difference mean \pm SD	Paired 't' value
Pre-test	13.54	\pm 3.37	3.85	27.57*
Post-test	28.56	\pm 6.45		

The data in the table depicts that the mean post-test knowledge score (28.56) is apparently higher than the mean pre-test knowledge score (13.54) as evidence by the statistical significance between pre and post-test knowledge score 't' 27.57*, $P < 0.05$ showed that there was increase in the knowledge level of staff nurses after administration of self-instructional module on Ebola virus disease and its management.

DISCUSSION

The present study is undertaken to evaluate the effectiveness of self-instruction module on knowledge regarding Ebola virus disease among staff nurses at Bombay Hospital, Indore.

Knowledge on Ebola virus disease among staff nurses

In the present study the pretest knowledge of staff nurses revealed that 23(46%) had good knowledge, 26(52%) had average knowledge and 1(2%) had poor knowledge.

The finding of the study were similar to the finding of the study conducted by Archana Dhanawade, noted that among 60 staff nurses 19(31.67%) had good knowledge and 41(68.33%) had poor knowledge, where as in the post-test 100% of the staff nurses had good knowledge in both the studies.

The post-test mean knowledge score 28.56 was apparently higher than pretest mean knowledge score 13.54.

These findings are similar to the findings of Archana Dhanawade, where post-test mean knowledge score 17.48 was higher than pretest mean knowledge score 12.34.

Effectiveness of self-instruction module on Ebola virus disease among staff nurses

In the present study, overall knowledge improvement was found after self-instruction module and the paired 't' 27.57* at $p < 0.05$ level significance proved that the selected hypothesis H_1 was accepted.

A similar study conducted by Jane Mary Jacob, showed that, paired 't' (26.82) at $p < 0.05$ level of significance. Hence, H_1 was accepted.¹³⁻¹⁴

CONCLUSION

Based on the findings of the study there was a significant increase in the knowledge of subjects after the introduction of self-instructional module. Thus it was concluded undoubtedly that the written prepared material by the group in the form of self-instruction module helped the staff nurses to improve their knowledge on Ebola virus diseases.

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